

5,975,892 issued 02 November 1999 and entitled "Pneumatic Flash Calciner Thermally Insulated in Feed Storage Silo". The entire specification of the original patent, including the drawings and claims, are enclosed.

Also submitted herewith is an amendment directing the entry of changes described below.

Please amend the above-identified application as follows:

IN THE SPECIFICATION:

Before the heading "BACKGROUND OF THE INVENTION", please insert the following:

NOTICE

More than one reissue application has been filed. The present reissue application is a division of reissue application serial number 10/004,151 filed 02 November 2001.

IN THE CLAIMS:

- a. Please cancel claims 1-19 without prejudice.
- b. Please add the following claims:

20. A method of operating a calcination plant for particulate material comprising the steps of:

admitting said particulate material into a calcination zone peripherally surrounded by a peripheral wall;

transporting said particulate material through at least part of said calcination zone along a substantially cyclonic flow path; and

adjusting the temperature in said calcination zone, the adjusting step including varying the rate of admission of said particulate material into said calcination zone, and said peripheral wall being substantially free of ceramic along said part of said calcination zone.

21. The method of claim 20, wherein said peripheral wall is substantially free of ceramic along substantially all of said calcination zone.

22. The method of claim 20, wherein the adjusting step is performed substantially exclusively by varying the rate of admission of said particulate material into said calcination zone.

23. The method of claim 20, wherein the admitting step comprises introducing said particulate material into said calcination zone substantially tangentially of said calcination zone.

24. The method of claim 20, further comprising the step of heating the interior of said cyclonic flow path.

25. The method of claim 24, wherein the heating step comprises directing a flame into said interior of said cyclonic flow path.

26. A method of operating a calcination plant for particulate material which undergoes calcination at or above a calcination temperature, said method comprising the steps of:

admitting said particulate material into a calcination zone;

calcining said particulate material in said calcination zone to produce a solid calcined product mixed with gas;

separating said solid calcined product from said gas in a solid-gas separation zone; and

maintaining at least the major part of said solid-gas separation zone at temperatures equal to or greater than said calcination temperature during at least the major part of the separating step.

27. The method of claim 26, wherein said calcination temperature is about 1700 degrees Fahrenheit.

28. The method of claim 27, wherein the temperatures in said calcination zone and said solid-gas separation zone are restricted to a maximum of about 2450 degrees Fahrenheit.

29. The method of claim 26, further comprising the step of transporting said particulate material along a substantially cyclonic flow path in said calcination zone.

30. The method of claim 29, wherein the admitting step comprises introducing said particulate material into said calcination zone substantially tangentially of said calcination zone.

31. A calcination plant for particulate material comprising:

means defining a calcination zone, said defining means including a peripheral wall which peripherally surrounds said calcination zone; and

means for transporting particulate material through at least part of said calcination zone along a substantially cyclonic flow path, said peripheral wall being substantially free of ceramic along said part of said calcination zone.

32. The plant of claim 31, further comprising means for adjusting the temperature in said calcination zone by varying the rate of admission of particulate material into said calcination zone.

33. The plant of claim 31, wherein said peripheral wall is substantially free of ceramic along substantially all of said calcination zone.

34. The plant of claim 31, wherein said transporting means comprises means for introducing particulate material into said calcination zone substantially tangentially of said calcination zone.

35. The plant of claim 31, further comprising means for heating the interior of said cyclonic flow path.

36. The plant of claim 35, wherein said heating means comprises a burner for directing a flame into said interior of said cyclonic flow path.